Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

JOHN HARRISON BLAKE.

In reviewing the printed matter, letters, completed manuscripts, and note-books which furnish the material for a personal memoir of my father, I have been impressed by the paucity of record of the achievements of an active life extending over the greater part of a century.

The reason for this is to be found in the character of the life itself, looking rather to accomplishment than to recognition, and seeking to express the sense of an obligation for the privilege of living by doing the work at hand simply and well.

Of published papers there are but few, — the Transactions of this Academy, of which he was elected a member May 30, 1843, contain none, other journals in the library of the Academy but five, and the records of the Boston Society of Civil Engineers, of which he was one of the founders and its first Secretary, an equally small number.

Of letters, especially family letters, there are many, all clearly written, containing information as to his travels and treating of the subjects in the study of which he was most interested.

Of the manuscripts, the majority, in the form of essays, were written after his retirement from active life with the evident purpose of continuing a companionship which has, to his son, the value both of a precious memory and a continued inspiration; the persistency with which this purpose was pursued, under conditions of failing strength and sight, is shown especially in one of them, begun in ink, continued in black and then in blue pencil when the blue mark alone was visible to him, and concluded by sense of touch.

These essays cover a wide range of scientific subjects and bear witness to an intellectual activity persisting to within the last three years of a life which ended, as gently and as graciously as it had been lived, at the age of ninety years. Through this life there had run one dominant purpose, — that of usefulness; in it there had always been one keen pleasure, — that of scientific research. The note-books, containing many valuable records and memoranda, are the transcripts of a variously active professional life, — one series covers very nearly the whole of the early experimental and constructive history of the manufacture of illuminating gas in this country, another is a record of researches in the chemistry of arts and manufacture, and another is devoted to mining, metallurgy, and civil engineering.

John H. Blake, the youngest son of Thomas and Mary Lowell Barnard Blake, was born December 5, 1808, in the house still standing on

Washington Street, corner of Union Park Street; he died in his home on Marlborough Street, Boston, July 5, 1899, in his ninety-first year. Mr. Blake was educated in private schools and in the English High School, which he entered in 1821 as a member of its first class. Later he became a pupil of the Rev. James Blake Howe, then rector of the West Parish Church in Claremont, N. H., whose daughter, a second cousin, he married on his return from his explorations in South America.

While his studies with Mr. Howe were mainly classical and he was fitted to enter Harvard, his interest in chemistry and in anatomy was such as to lead him to prefer these studies to those of a collegiate course principally literary and mathematical. It was in pursuit of his chosen subjects that, after a period of study in a chemical manufacturing establishment, he became assistant to, and pupil of, Dr. Webster, from whom he received valuable instruction, which enabled him in the year 1827, when only nineteen years of age, to establish, with money advanced by his father, the Norfolk Laboratory, for the manufacture of pure drugs and chemicals. This laboratory was situated in Jamaica Plain near Forest Hills, upon the Dedham Turnpike. One of its products was pure sulphuric ether, and it was in the larger laboratory of later construction that the ether used in the first demonstration of the value of ether anaesthesia was made under Mr. Blake's personal supervision. In addition to the commercial work of the laboratory Mr. Blake carried on a series of investigations into the physiological effects of poisons, the composition of precious stones, and the production of alloys applicable to the mechanic arts. At the end of three years of successful operation the buildings were destroyed by a fire, resulting from the explosion of a carboy of ether, but were immediately rebuilt on a larger scale; a joint stock company was formed, arrangements were made with the Rothschilds for the importation of quicksilver, and with a house in Tuscany controlling what was then the world's principal supply of boric acid; and Mr. Maximilian Isnard, who introduced the manufacture of beet-root sugar into France, became an associate.

At that time but little was known of the sources of supply of nitrate of soda, of which large quantities were used in the works, beyond the names of the small ports on the coast of Peru from which it was shipped.

Ignorance on the subject, the value of the article, and the novelty of entering and exploring an unknown region were sufficient incentives to turn Mr. Blake's thoughts in this direction rather than along the beaten lines of travel in search of the rest and recreation which he needed after eight years of anxious labor. Books gave very little information concerning the country between the Pacific Ocean and the Andes, constituting the extreme southern part of Peru, the western part of Bolivia, and the northern part of Chili, and all the knowledge that could be obtained was that it was, for the most part, uninhabited and uninhabitable, destitute of vegetation, and known as the Desert of Atacama ; it was on the shores of the northern part of this desert that the shipment ports referred to were situated.

The winter of 1835 and 1836 was very cold, New York harbor was frozen over, and it was not until the 10th of February, 1836, nearly a month after the time proposed for her departure, that the ship " Factor," in which Mr. Blake was a passenger, made her way through a channel cut in the ice and sailed for Valparaiso, where she arrived June 9, sailing again on the 9th of July for Arica and Tacna, whence Mr. Blake proceeded by land to Pisaqua and Iquique, arriving at the latter place on the 6th of August. The next three months were devoted to surveys in the province of Tarapaca, and on the 7th of November Mr. Blake left Iquique with a pack train, two Indians, and dogs to make the first recorded exploration of the Desert of Atacama from north to south, arriving at Valparaiso on the 10th of March, having occupied four months and three days in a trying passage over an arid and waterless region, in which all of the animals were lost and the men nearly perished from thirst.

On March 15 Mr. Blake left Valparaiso for Buenos Ayres by Santiago, the pass of Uspalato and Mendoza, crossing the Andes and the Pampas de la Plata, arriving on the 28th of April and making preparations for immediate departure for the United States.*

At this time Rosas, the then Dictator of the Argentine Republic, was engaged in strengthening his position by military activity and the projected subjection of the Indian tribes to the westward. Mr. Blake was detained as consulting engineer on fortifications, and was not released until the autumn of 1837,† when he returned to the United States to find a condition of general financial disaster, in which the Norfolk Laboratory had shared and which made it impossible to take up the grants for the mining and exportation of nitre secured from the Peruvian government. Under these conditions he accepted the management of the Fernandez copper mines in Santa Clara, Cuba, married, and took up his residence there, where, in addition to the work in hand, he made observations on the character and climate of the country. In 1847 he assisted in the geologic survey of Isle Royale, Lake Superior,* and in 1848 entered into partnership with Franklin Darracott as a civil engineer, to which work he added that of a consulting chemist and geologist. It was his custom to make no charge for consultation to individuals seeking to develop new industries, regarding this as his contribution to the general welfare. Among many to whom he gave valuable advice were Goodyear and Babbitt.

---

* The only record of this interesting and perilous journey is to be found in family letters, in the collection of mummies and other objects of archæological value now in the Peabody Museum, Cambridge, and in the description of this collection published from Mr. Blake's notes in the reports of the Museum. The carefully kept notebook, containing not only the daily incidents of travel, but especially the memoranda of geologic observations, of barometric measurements and surveys, was stolen after Mr. Blake's return to this country, and never recovered.

† Information to be derived from a traveller who had just crossed the continent was of value, and Mr. Blake received a courteous note, saying that a house adjoining that of the British Embassy had been placed at his disposal, and requesting him

The business of the firm of Blake and Darracott had largely to do with gas engineering and the construction of gas works, and Mr. Blake organized and was at one time president of five gas companies, his executive ability and power of control over men making such work a pleasure. In addition he was interested in iron and gold mining, carrying on the ore beds and blast furnaces and car wheel works at Brandon, Vermont, and organizing and operating the Yahoola River Hydraulic Mining Company, of which he was president, in the Dahlonega belt, Georgia. After the dissolution of the firm of Blake and Darracott he became interested in street railways, building the Middlesex Road and being the President of the Metropolitan Road during the period of the Civil War: subsequently he was President of the Connecticut Arms Manufacturing Company, and organized and was the first President of the Chapman Valve Manufacturing Company.

One of Mr. Blake's latest contributions to manufactures was the so-called antique glass. Wishing to carry out previous experiments on molecular movement in solids at protracted high temperatures, he constructed a crucible furnace in South Boston, and in order to make it pay its expenses manufactured glass upon the basis of his earlier analyses of precious stones, the result being a glass of great brilliancy and vivid color.

---

to remain as the guest of the Dictator. The invitation was declined, but was repeated in an equally courteous note brought by a file of soldiers, the note further stating that the Dictator trusted that the invitation would be accepted, as it would pain him to be obliged to provide any narrower accommodation.

* The promontory at the northeasterly extremity of the island is called Blake Point.

The mental activity which had stimulated bodily action beyond the usual term of working years continued to find its expression, even after he had become confined to the limits of his own home, in the manuscripts which contain those products of his mental laboratory impossible of record in busier times; as might be expected they give an insight into the motive power of his life and show the strength of a character which looked forward calmly to bodily dissolution as a part of the process of growth to greater knowledge.

Through the vicissitudes of incessant and protracted work, with the usual meed of disappointment and much of physical pain, Mr. Blake held always the cheerful courage born of a simple faith, which counted life as a primary school and the suffering of his advanced years as a part of its graduating exercises; prominent in my memory of him are his fearlessness, his kindliness, his love of truth, and his earnest desire not to fail in doing his part of the world's work, whatever that might honestly be, and this also, that in fifty-seven years of a dear and close companionship, I cannot recall a single unkind, unjust, or impatient word.

CLARENCE JOHN BLAKE.

CHARLES FRANKLIN DUNBAR.

CHARLES FRANKLIN DUNBAR, Fellow of the American Academy for twenty-eight * years, Professor of Political Economy in Harvard University for nearly thirty years, was born at Abington, Massachusetts, July 28, 1830, and died at Cambridge, Mass., January 29, 1900.

Professor Dunbar's career divides itself into two very different parts; a first, during which he was editor and guiding spirit of the Boston Daily Advertiser; and a second, during which he lived the quiet life of the teacher and scholar.

It was not until he had reached mature manhood that he entered on his newspaper career. After graduating from Harvard College in 1851, he engaged for a short time in business; then, health failing, spent a year in farming; then studied at the Harvard Law School and in the office of the late Justice E. R. Hoar, and was admitted to the Bar in 1858. Meanwhile, contributions from his pen had appeared in the Advertiser; and finally, in 1859, he became permanently associated with

---

* Elected January 31, 1872.